

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) Separator material for forming a separator for a lead-acid accumulator, wherein the separator material comprises two side edge areas, a first layer in the form of a microporous sheet, which is made of a thermoplastic and has a number of protrusions, each defining an area of increased film thickness, on at least one face of a base sheet, and at least one second layer in the form of a planar fleece material which is located on a face of said microporous sheet having such protrusions, and wherein the at least one planar fleece material is bonded to said microporous sheet by a number of welded joints such that the planar fleece material is located at least at the level of the surface of the base sheet in the area of the welded joints and does not penetrate into this, said planar fleece material being bonded to at least some of said protrusions of said microporous sheet by the welded joints, said protrusions comprising elevated height protrusions adapted for receiving said welded joints, and wherein said elevated height protrusions including a rib in each of the two side edge areas of the separator material and the welded joints include welded joints on these two side ribs.

2. (Cancelled)

3. (Previously presented) Separator material according to claim 1, characterized in that the protrusions comprise ribs which run vertically and extend over the entire length of the separator material.

4. (Previously presented) Separator material according to claim 3, characterized in that the ribs which run vertically each comprise a rib in each of the two side edge areas of the separator material and the welded joints comprise weld seams which run on these two side ribs.

5. (Previously presented) Separator material according to claim 4, characterized in that the two side ribs are continuous ribs and said welded joints are continuous weld seams.

6. (Previously presented) Separator material according to claim 4, characterized in that the two side ribs are discontinuous ribs and said welded joints are discontinuous weld seams.

7. (Previously presented) Separator material according to claim 1, characterized in that the welded joints are spot-

welded joints.

8. (Previously presented) Separator material according to claim 1, characterized in that the microporous sheet is made of a polyolefin.

9. (Original) Separator material according to claim 8, characterized in that the polyolefin has a molecular weight of at least 300,000, a melt index under normal conditions of substantially 0 and a viscosity number of not less than 600 ml/g.

10. (Original) Separator material according to claim 9, characterized in that the polyolefin is polyethylene.

11. (Previously presented) Separator material according to claim 10, characterized in that the microporous film is produced from polyethylene having a filler content of silica.

12. (Previously presented) Separator material according to claim 1, characterized in that at least 50% of the pores of the microporous film have a diameter of 0.5 μm or less.

13. (Previously presented) Separator material according to claim 1, characterized in that the microporous sheet has a thickness of from 0.1 to 0.6 mm in areas without

protrusions.

14. (Previously presented) Separator material according to claim 1, characterized in that the fleece material substantially consists of glass fibres.

15. (Previously presented) Separator material according to claim 1, characterized in that the fleece material substantially consists of polyester fibres.

16. (Previously presented) Separator material according to claim 1, characterized in that the fleece material comprises a mixture of glass fibres and polyester fibres.

17. (Original) Separator material according to claim 16, characterized in that the content of glass fibres in the mixture is not more than 70 wt. %.

18. (Previously presented) Separator material according to claim 1, characterized in that the fleece material has a thickness of from 0.1 to 0.25 mm.

19. (Currently amended) Process for the production of a separator material for forming a separator for a lead-acid accumulator, according to claim 1, with the steps: (a) provision of a microporous sheet, which is made of a

thermoplastic and has a number of elevated height protrusions, each defining an area of increased sheet thickness, on at least one face of a base sheet, said separator material having two side edge areas, and wherein said elevated height protrusions include a rib in each of said two side edge areas of the separator material, (b) provision of at least one planar fleece material, (c) location of the at least one planar fleece material on a face of the sheet having such protrusions and (d) welding of the at least one planar fleece material with at least some of the protrusions of the sheet, such that the planar fleece material is located at least at the level of the surface of the film base sheet in the area of the welded joints and does not penetrate into this, and the welded joints include welded joints on said two side ribs.

20. (Original) Process according to claim 19, characterized in that the welding takes place by means of ultrasonic welding.

21. (Previously presented) Process according to claim 19 or claim 20, characterized in that at least some of the protrusions of the microporous sheet have a height of from 0.5 to 0.6 mm and the welding takes place with these protrusions.

22. (Previously presented) Process according to one of claims 19 or 20, characterized in that said planar fleece material has a thickness of from 0.1 to 0.25 mm.

23. (Previously presented) Process according to claim 19, wherein the step of welding of the at least one planar fleece material with at least some of the protrusions of the sheet causes at least some of the protrusions to disappear completely during the welding process.

24. (Previously presented) Process according to claim 19, wherein the step of locating the at least one planar fleece material on a face of the sheet having protrusions comprises gradually laying one of said at least one planar fleece material and said sheet having protrusions on the other in sections.

25. (Previously presented) Process according to claim 19, wherein the step of locating the at least one planar fleece material on a face of the sheet having protrusions comprises gradually laying one of said at least one planar fleece material and said sheet having protrusions on the other continuously.

26. (New) Separator material according to claim 1, wherein said edge areas of said sheet are not covered with said

planar fleece material.

27. (New) Separator material according to claim 26, wherein the width of said edge areas is between 5.5 and 9.5 mm.